

Application No. 09/845,985

REMARKS

Claims 1-4, 6-10, 12, 14-21, 48-50 and 52-61 are pending. All of the pending claims stand rejected. Applicants respectfully request reconsideration of the rejections based on the following comments. Applicants note that experimental results relating to assertions below will be available as soon as further analysis is performed, and a Declaration based on these results will be presented shortly.

Rejection Under 35 U.S.C. § 112

The Examiner rejected claims 1-4, 6-10, 12-21 and 48-61 under 35 U.S.C. § 112, second paragraph as being indefinite. For conciseness, Applicants incorporate by reference their arguments from the Amendments of March 29, 2005 and August 15, 2005. The Examiner asserted that "less than and greater than" describe "definite maximum and minimum" values that are contradicted by the term "about." With all due respect, it is unclear who the Examiner would assert is a person of ordinary skill in the art. Scientists put error bars on their measurements. A person of ordinary skill in the art would recognize that in the real world exact values of real non-integer numbers are meaningless. Applicants respectfully request that the Examiner explain who is being described as a person of ordinary skill in the art and why such a person would not understand this simple language. Such an assertion seems incredible to Applicants. Even in Europe where the law has much stricter standards on these issues than under U.S. law, "about" is accepted in claims relating to the nanoscale. See, for example, EP 1 027 400B and EP 1 027 819B.

Applicants maintain that the Examiner has failed to establish *prima facie* indefiniteness of the claims. Applicants respectfully request the withdrawal of the rejection of claims 1-4, 6-10, 12-21 and 48-61 under 35 U.S.C. § 112, second paragraph as being indefinite.

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Rejection Over Kamauchi et al.

The Examiner rejected claims 1-4, 6, 7, 10, 12, 14-17, 19-21, 48-50, 52, 53 and 55-61 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 5,538,814 to Kamauchi et al. (the Kamauchi patent). For conciseness, Applicants incorporate by reference their arguments from the Amendments of March 29, 2005 and August 15, 2005. Applicants maintain that the Examiner has failed to establish *prima facie* obviousness over the Kamauchi patent. Applicants respectfully request reconsideration of the rejection based on the following comments.

Prima facie obviousness is not established if all the elements of the rejected claim are not disclosed or suggested in the cited art. In re Ochiai, 37 USPQ 1127, 1131 (Fed. Cir. 1995). ("The test for obviousness *vel non* is statutory. It requires that one compare the claim's 'subject matter as a whole' with the prior art 'to which said subject matter pertains.'"). See also, MPEP 2143.03 "All Claim Limitations Must Be Taught or Suggested," citing In re Royka, 180 USPQ 580 (CCPA 1974). "To establish prima facie obviousness of a claimed invention, all of the claim limitations must be taught or suggested by the prior art." MPEP 2143.03.

With respect to the claimed uniformity, the Examiner points to language at column 5, lines 40-53. This language does not teach the claim feature. Therefore, regardless of motivation, *prima facie* obviousness simply has not been established. Even if motivation were established, which it has not, that is simply not enough. The MPEP makes it clear that the limitation must be taught independent of motivation. **This is a completely dispositive issue.**

With respect to lack of motivation, in the cited text, the Kamauchi patent described a desirability to have the average particle sizes of the different materials, i.e., the electrically conductive carbons, the electroactive metal oxides and the polymer particles, to be close to the same. Contrary to the Examiner's assertions, this could be an argument of the desirability of an electroactive material with a broader range of particle sizes to achieve more overlap with the particle sizes of the other components. Certainly, this discussion does not teach

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or suggest a desirability of the uniformity of the electroactive metal compound particles at the level claimed.

While a reference is prior art for all that it teaches, references along with the knowledge of a person of ordinary skill in the art must be enabling to place the invention in the hands of the public. In re Paulsen, 31 USPQ2d 1671, 1675 (Fed. Cir. 1994). See also In re Donohue, 226 USPQ 619, 621 (Fed. Cir. 1985). "The consistent criterion for determination of obviousness is whether the prior art would have suggested to one of ordinary skill in the art that this process should be carried out and would have a reasonable likelihood success, viewed in light of the prior art." Micro Chemical Inc. v. Great Plains Chemical Co., 41 USPQ2d 1238, 1245 (Fed. Cir. 1997)(quoting In Re Dow Chemical Co., 5 USPQ2d 1529, 1531 (Fed. Cir. 1988)).

The proposition is well established that the cited art only renders a composition of matter or apparatus unpatentable to the extent that the cited art enables the disputed claims, in other words, if the cited art provides a means of obtaining the claimed composition or apparatus.

To the extent that anyone may draw an inference from the Von Bramer case that the mere printed conception or the mere printed contemplation which constitutes the designation of a 'compound' is sufficient to show that such a compound is old, regardless of whether the compound is involved in a 35 U.S.C. 102 or 35 U.S.C. 103 rejection, we totally disagree. ... We think, rather, that the true test of any prior art relied upon to show or suggest that a chemical compound is old, is whether the prior art is such as to place the disclosed 'compound' in the possession of the public. In re Brown, 141 USPQ 245, 248-49 (CCPA 1964)(emphasis in original)(citations omitted).

The Examiner has not provided any evidence that the procedures taught in the Kamauchi patent are suitable for forming the claimed particle size uniformity. It is the Examiner's burden to establish a reasonable expectation of success. Furthermore, Applicants are obtaining experimental data relating to the process of the Kamauchi patent and will submit an appropriate Declaration.

Since the Examiner has failed to establish a teaching of the claim features in the cited reference, of motivation for the claimed particle properties or of a reasonable expectation of

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success even if the requisite teaching and motivation were found *arguendo*, the Examiner has fallen far, far short of establishing a *prima facie* showing of obviousness. Thus, Applicants respectfully request withdrawal of the rejection of claims 1-4, 6, 7, 10, 12, 14-17, 19-21, 48-50, 52, 53 and 55-61 under 35 U.S.C. § 103(a) as being unpatentable over the Kamauchi patent.

Rejection Over Kamauchi et al. and Goodenough et al.

The Examiner rejected claims 8, 9 and 18 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 5,910,382 to Goodenough et al. (the Goodenough patent) in view of the Kamauchi patent as applied to the corresponding independent claims. For conciseness, Applicants incorporate by reference their arguments from the Amendment of March 29, 2005 and August 15, 2005. The Goodenough patent does not make up for the deficiencies of the Kamauchi patent described in detail above. Therefore, the combined teachings of the Kamauchi patent and the Goodenough patent do not render claims 8, 9 and 18 *prima facie* obvious. Applicants respectfully request withdrawal of the rejection of claims 8, 9 and 18 under 35 U.S.C. § 103(a) as being unpatentable over the Goodenough patent in view of the Kamauchi patent as applied to the corresponding independent claims.

Rejection Over Bodiger et al.

The Examiner rejected claims 54-56, 58, 59 and 61 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 5,849,827 to Bodiger et al. (the Bodiger patent). The Examiner admits that the reference has many shortcomings. First, the Examiner admits that the reference does not teach crystalline materials. Further, the Examiner admits that the reference does not teach the claimed particle uniformity. However, the reference does not even fairly suggest the claimed material. With all due respect, Applicants respectfully assert that the

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Examiner has fallen far, far short of establishing *prima facie* obviousness. Applicants respectfully request reconsideration of the rejections based on the following comments.

Guidelines for evaluation for obviousness of a species when a reference discloses a genus is outlined in MPEP 2144.08. As noted in MPEP 2144.08 IIA, "there must be some motivation or suggestion to make the claimed invention in light of the prior art teaching" to establish *prima facie* obviousness. Relevant factors include size of the genus, differences between the disclosed teachings in the reference and the claimed subject matter, and motivation.

Applicants could not identify any lithium compounds disclosed in the Bodiger patent. The Examiner points to disclosure basically indicating that any metal can be used. The only phosphate compound described at all is aluminum phosphate. Applicants could not find any description of metal phosphates generally given that phosphorous itself is not a metal. This broad disclosure of a genus of metal compounds simply does not point to a lithium phosphate compound as presently claimed.

The Examiner states incorrectly that "One of ordinary skill in the art would recognize that crystallinity of the material will not affect the properties of the composition." With all due respect, this is simply incorrect. Many properties, such as thermal properties, index of refraction and the like, depend on the crystal structure. Thus, the reference certainly does not fairly suggest a crystalline compound with a lithium cation and a phosphate anion.

The Examiner stated that "It would be obvious to one of ordinary skill in the art at the time that the invention was made to prepare a mixture with essentially no particle with a diameter greater than about 3 or 5 times the average particle size OR that at least about 95 percent of the particles have a diameter greater than about 40 percent and less than about 160 percent of the average diameter, as one of ordinary skill in the art would recognize that when a desired average diameter is disclosed in the prior art, choosing particles close to that diameter would be desirable for the function described in the reference." With all due respect, this does

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not follow at all from the knowledge in the art. The reference teaches only average particle sizes. The reference says nothing at all about the desired uniformity of the materials. The Bodiger patent describes a surprising and not understood reduction in burn times due to the inclusion of the inorganic particles. See column 1, lines 51-56. For all that is known, a broad distribution in particle sizes is needed to obtain this behavior. The Examiner's broad statement to the contrary is certainly not a suggestion in the art that flame retardants would benefit from more uniform particles. Furthermore, the reference certainly does not suggest how such uniform materials could be obtained. Thus, there is simply no teaching of all of the claim elements, and the Bodiger patent does not provide a reasonable expectation of success.

In summary, the Bodiger patent fails to fairly suggest crystalline particles with a lithium cation and a phosphate anion or to teach, motivate or provide a reasonable expectation of success with respect to the claimed particle size uniformity. With all due respect, the Examiner has fallen far short of establishing *prima facie* obviousness of Applicants' claimed invention over the Bodiger patent. Applicants respectfully request withdrawal of the rejection of claims 54-56, 58, 59 and 61 under 35 U.S.C. § 103(a) as being unpatentable over the Bodiger patent.

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CONCLUSIONS

In view of the foregoing, it is submitted that this application is in condition for allowance. Favorable consideration and prompt allowance of the application are respectfully requested.

The Examiner is invited to telephone the undersigned if the Examiner believes it would be useful to advance prosecution.

Respectfully submitted,



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